WHAT IS CLAIMED IS:

1. A method of treating a workpiece by applying shockwaves thereto, comprising the steps of:

applying an energy-absorbing overlay to a portion of a surface of the workpiece, said energy-absorbing overlay being composed of a liquid material resistant to dissolution by the transparent water overlay and resistant to drying;

applying a transparent overlay upon said energy-absorbing overlay; and

directing a pulse of coherent energy to said energy-absorbing overlay, said pulse of coherent energy causing a portion of said energy-absorbing overlay to vaporize and thereby generate at least one shockwave for transmission to the workpiece.

2. The method of claim 1, wherein said liquid erosion-resistant and drying-resistant material has a combined viscosity and level of adherence such that said energy-absorbing overlay made thereof tends to conform and adhere to the workpiece under substantially static conditions yet is capable of fluid displacement when subjected to at least one shockwave.

3. The method of claim 1, wherein said liquid erosion-resistant and drying-resistant material is a colloidal substance having at least one energy-absorbing particulate dispersed therein.

4. The method of claim 3, wherein said colloidal substance is a mixture of an oil and graphite.

5. The method of claim 3 wherein said colloidal substance is a mixture of oil and black iron oxide (Fe_2O_3).

6. The method of claim 3 wherein said colloidal substance is a mixture of oil, colloidal graphite and black iron oxide (Fe_2O_3).

7. The method of claim 1, wherein said energy-absorbing overlay has a viscosity of a magnitude that permits said energy-absorbing overlay to conform with a surface of the workpiece under substantially static conditions and yet to be fluidly displaced when subjected to sufficiently dynamic conditions.

8. The method of claim 7, wherein the sufficiently dynamic conditions occur during at least one of said applying an energy-absorbing overlay step and said directing a pulse step.

9. The method of claim 1, wherein said energy-absorbing overlay includes at least a first overlay portion and a second overlay portion, said first overlay portion being sacrificed upon impact of the pulse of coherent energy, said second overlay portion being reusable for a subsequent shockwave creation.

10. The method of claim 9, wherein the second overlay portion is fluidly displaced laterally along the workpiece surface, away from an impingement point of the pulse of coherent energy, an amount of the second overlay portion being displaced into an other proximate treatment location upon the workpiece.

11. The method of claim 10, comprising the further steps of:

applying a transparent overlay on the amount of the second overlay portion displaced into the other proximate treatment location; and

directing a pulse of coherent energy through the transparent overlay to the amount of the second overlay portion displaced into the other proximate location to effect a shockwave formation thereat.

12. The method of claim 11, further comprising the steps of:

monitoring the amount of the second overlay portion displaced into the other proximate treatment location, said monitoring thereof being performed prior to the step of applying the transparent overlay thereto; and

adjusting a total thickness of the energy-absorbing overlay existing at the other proximate treatment location to thereby conform with a desired thickness therefor.

13. The method of claim 1, further comprising the step of reclaiming any remaining amount of said energy-absorbing overlay.

14. The method of claim 1, wherein the coherent energy is in a form of laser energy.

15. An energy-absorbing overlay for use in conjunction with a laser-induced shock process, comprising:

a liquid base material, said base material being resistant to drying and resistant to dissolution by a transparent water overlay; and

at least one energy-absorbing particulate dispersed within said base material.

16. The energy-absorbing overlay of claim 15, wherein said base material is an oil and said energy-absorbing particulate is graphite.

17. The energy-absorbing overlay of claim 15, wherein said base material is an oil and said energy-absorbing particulate is at least one of graphite and black iron oxide (Fe_2O_3).

18. The energy-absorbing overlay of claim 17, wherein said energy-absorbing particulate is a mixture of graphite and black iron oxide (Fe_2O_3).

19. The energy-absorbing overlay of claim 15, wherein said base material has a combined viscosity and level of adherence such that the energy-absorbing overlay made thereof tends to conform and adhere to a workpiece under substantially static conditions yet is capable of fluid displacement when subjected to sufficiently dynamic conditions.

20. The energy-absorbing overlay of claim 15, wherein any portion thereof remaining after the laser-induced shock process is capable of being at least one of reclaimed, reused, and recycled.

21. A method of treating a workpiece by applying shockwaves thereto, comprising the steps of:

applying an energy-absorbing overlay to a portion of a surface of the workpiece, said energy-absorbing overlay being

composed of an adherent, uniformly spreading material, said adherent, uniformly spreading material being resistant to drying;

applying a transparent overlay upon said energy-absorbing overlay; and

directing a pulse of coherent energy to said energy-absorbing overlay, said pulse of coherent energy causing a portion of said energy-absorbing overlay to vaporize and thereby generate at least one shockwave for transmission to the workpiece.

22. The method of claim 21, wherein said adherent, uniformly spreading material displaces easily enough laterally when sprayed so as to thereby reach a coating thickness having a self-limiting maximum.

23. The method of claim 21, further comprising the step of:

one of pre-coating and pre-spraying the workpiece with said adherent, spreading material prior to said step of applying said energy-absorbing overlay.

24. The method of claim 23, wherein said step of applying said energy-absorbing overlay includes supplying said adherent, spreading material at locations where it is needed and one of lacking and supplied at an insufficient thickness.

25. The method of claim 21, further comprising the step of:

cleaning the workpiece after the treating of the workpiece by applying shockwaves thereto, said step of cleaning the workpiece being a spray cleaning technique.

26. The method of claim 21, wherein a plurality of spots are treated during the treating of the workpiece, said energy-absorbing overlay being applied to each of said spots individually, said method further comprising the step of:

removing said energy-absorbing overlay from each said spot after performing the step of directing the pulse of said coherent energy upon said each said spot.

27. The method of claim 21, further comprising the step of:

using an automated means for ensuring at least one of that a correct amount of said energy-absorbing overlay has been applied at a given treatment spot and that the laser beam has been applied at the given treatment spot prior to a next treatment step being performed.

28. The method of claim 27, wherein said automated means is configured for measuring an applied amount of said energy-absorbing overlay, said automated means being one of a mass/flow meter, a video monitor, a plasma monitor, and an acoustic monitor.

29. The method of claim 21, wherein at least one first spray nozzle is used for applying said energy-absorbing overlay, at least one second spray nozzle being used for applying said transparent overlay, each said first spray nozzle and each said second spray nozzle having a protector fitted therewith, each said protector being configured for shielding a segment of the workpiece from potential damage from a coating material being ejected through a given said spray nozzle.